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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/811,526	03/20/2001	Nagahisa Chikazawa	010363	9425	
759	90 06/06/2006	EXAM	EXAMINER		
•	attori, Daniels & Adria	LAROSE,	LAROSE, COLIN M		
1250 Connectice Suite 700	ut Avenue, N.W.	ART UNIT	PAPER NUMBER		
Washington, DC 20036			2624		
			DATE MAILED: 06/06/2000	DATE MAILED: 06/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

**		Application	on No.	Applicant(s)				
Office Action Summary		09/811,52	e6	CHIKAZAWA ET AL.				
		Examiner		Art Unit				
		Colin M. L		2624				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence ad	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP CHEVER IS LONGER, FROM THE MAILING nsions of time may be available under the provisions of 37 CFR of SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by staturely received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no eve od will apply and wi ute, cause the appl	IIS COMMUNICATION ent, however, may a reply be time Il expire SIX (6) MONTHS from ication to become ABANDONE!	I. lely filed the mailing date of this of (35 U.S.C. § 133).				
Status								
1)⊠	Responsive to communication(s) filed on 10	February 200	<u>06</u> .					
2a) <u></u> ☐	This action is FINAL . 2b) This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4) Claim(s) <u>1-15</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-15</u> is/are rejected.								
7)	7) Claim(s) is/are objected to.							
8)[Claim(s) are subject to restriction and	or election re	equirement.					
Applicati	on Papers			,				
9)□	The specification is objected to by the Examir	ner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for foreig ⊠ All b)□ Some * c)□ None of:	gn priority und	ler 35 U.S.C. § 119(a)	-(d) or (f).				
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the International Bure	•	, ,,					
* 5	See the attached detailed Office action for a lis	st of the certif	ied copies not receive	d.				
Attachmen	tie)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	ail Date				
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 r No(s)/Mail Date	8)	5) Notice of Informal Pa	I Patent Application (PTO-152)				

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DETAILED ACTION

Arguments and Amendments

1. Applicant's amendments and arguments filed 10 February 2006, have been entered and made of record.

Applicant's 2/10/06 submission also included a request to reopen prosecution of this application after receiving an Examiner's Answer that contained new grounds of rejection.

Examiner mistakenly submitted a notice of a defective reply brief in response thereto. Please ignore the notice of a defective reply brief. This non-final action replaces and supercedes that notice.

Response to Amendments and Arguments

2. Applicant's remarks concerning claim 1 have been considered and are persuasive. Setlak does not appear to fairly disclose or suggest that the electrode 54 ("contact section") is electrically connected to ground. Therefore, the rejection of claim 1 in view of Setlak has been withdrawn. In addition, the rejections of all other claims that relied on such an interpretation of Setlak have been withdrawn.

In view of newly-discovered prior art, new grounds of rejection for independent claims 1, 7, and 15 appear below. These rejections have been made with an intervening prior art reference and can be overcome by providing a translation of Applicant's priority document(s). See below for details.

3. Setlak is still considered to be applicable to independent claims 3, 4, 9, and 13, primarily because these claims do not require the movable cover and the grounded contact section to be

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"separate elements." Rejections of these claims under Setlak (and Bradney) appear below, wherein Setlak's grounded cover 53' is interpreted as corresponding to both the claimed "movable cover" and the claimed "contact section." See below for details.

Claim Objections

4. Applicant's amendments to claims 5 and 15 are sufficient to overcome the previous objections thereto.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 2, 7, 8, and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Patent 2001005951A by Suzuki et al., published 12 January 2001.

Regarding claims 1 and 7, Suzuki discloses a fingerprint recognizing apparatus (figure 2 - see Abstract for the description) comprising:

a sensor section (5) mounted on the apparatus body for detecting a fingerprint of an operator;

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a cover (7) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position; and

a contact section (6) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to the ground of the apparatus body,

wherein the contact section is a separate element from the cover.

Further regarding claim 7, Suzuki's fingerprint apparatus is mounted on a laptop, which serves as a unit casing.

Regarding claims 2 and 8, Suzuki's cover (7) has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover (i.e. this is apparent from figure 2).

Regarding claim 15, Suzuki discloses an information processing unit including a fingerprint recognizing apparatus, said unit comprising:

a unit casing (laptop computer 1) comprising a data input section and a data processing section for processing data input from the data input section;

a display section (display 9) for displaying letters and images; and

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section (5);

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a cover (7) movable between an open position and a closed position for protecting the sensor section; and

a contact section (6) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing, and wherein the contact section is a separate element from the cover.

7. Claims 13 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,940,526 by Setlak et al. ("Setlak").

Regarding claim 13, Setlak discloses an electrical unit (e.g. figure 1) including a fingerprint recognizing apparatus, said unit comprising:

a unit casing (51);

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section (i.e. placement surface 52 coupled with sensing electrode 78);
a cover (53', figure 4) movable between an open position and a closed position
for protecting the sensor section; and

a contact section (53', figure 4) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing (i.e. when the operator performs an action to open the cover 53', the finger contacts the surface of the cover ("contact section") -- as shown in figure 4, the contact section/cover 53' is electrically

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connected to ground so as to provide for electrostatic discharge when the finger moves the cover to expose the sensor -- see col. 6/38-47), and

a ground contact plate (53', figure 4) which is rigidly connected to the unit casing, the contact section is formed as a part of the ground plate (i.e. the cover ("contact section") is connected to ground, so it is considered a "ground plate"; it is also rigidly connected to the unit casing in that it is not detachable -- i.e. even though is it "pivotally" connected to the casing, it is also "rigidly" connected to the casing).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 3-5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,940,526 by Setlak et al. ("Setlak") in view of U.S. Patent 6,208,264 by Bradney et al. ("Bradney").

Regarding claim 3, Setlak discloses a fingerprint recognizing apparatus (figure 4, and corresponding elements of figure 2) comprising:

a sensor section (52 & 78, figure 2) mounted on the apparatus body for detecting a fingerprint of an operator (sensor section comprises placement surface 52, on which a finger is placed, and sensing electrode 78, which is connected to sensing electronics – see figure 2, col. 4/46-51, and col. 5/21-25);

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a cover (53', figure 4) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position (i.e. the cover 53' is disposed over the package 51, as shown in figure 4 and described at col. 6/38-47; figure 2 shows that the package 51 includes the placement surface 52 – since the cover 53' covers the package 51, it also covers the placement surface 52; when the operator opens the cover, his finger can access the sensor section in order to place his finger on the placement surface 52); and

a contact section (53', figure 4) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to the ground of the apparatus body (i.e. when the operator performs an action to open the cover 53', the finger contacts the surface of the cover ("contact section") -- as shown in figure 4, the contact section/cover 53' is electrically connected to ground so as to provide for electrostatic discharge when the finger moves the cover to expose the sensor -- see col. 6/38-47),

Setlak does not expressly disclose that the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base of the cover, and that the contact section is arranged in a recess which is provided on the apparatus body at a position near to the free end of the cover when it is in the closed position.

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Setlak discloses that the cover 53' is "pivotally connected" (col. 6/43-44), however,

Setlak does not expressly disclose that the cover 53' "has one free end and another base end and
is moved ... by means of a hinge," as claimed.

Bradney discloses a fingerprint sensing apparatus (figure 4a) that utilizes a cover pivotally connected cover disposed over the sensing portions in substantially the same manner as Setlak. Bradney's figure 4a shows the cover being pivotally connected by means of a hinge so that the cover has one free end and another base end that pivots. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a hinge as taught by Bradney, since Bradney shows that utilizing a hinge is a conventional way to "pivotally connect" a fingerprint sensor cover.

In addition, figure 4a of Bradney illustrates a fingerprint sensor apparatus design where the hinged cover 50 ("contact section") is arranged in a recess, which is provided on the apparatus body at a position near to the free end of the cover when the cover is in the closed position. As shown in figure 4a, when the cover 50 is in the closed position, a portion thereof is arranged in a recess (i.e. it fits into a recess) on the apparatus body corresponding to the location of the sensor. Such a design would have been obvious to those skilled in the art at least for the ergonomic benefits of comfortably receiving a user's finger in a recessed portion and providing a cover that completely covers the recessed sensor portion when the cover is in the closed position. Bradney shows this design of a fingerprint apparatus to be conventional and well-known.

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Regarding claim 4, Setlak discloses a fingerprint recognizing apparatus (figure 4, and corresponding elements of figure 2) comprising:

a sensor section (52 & 78, figure 2) mounted on the apparatus body for detecting a fingerprint of an operator (sensor section comprises placement surface 52, on which a finger is placed, and sensing electrode 78, which is connected to sensing electronics – see figure 2, col. 4/46-51, and col. 5/21-25);

a cover (53', figure 4) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position (i.e. the cover 53' is disposed over the package 51, as shown in figure 4 and described at col. 6/38-47; figure 2 shows that the package 51 includes the placement surface 52 – since the cover 53' covers the package 51, it also covers the placement surface 52; when the operator opens the cover, his finger can access the sensor section in order to place his finger on the placement surface 52); and

a contact section (53', figure 4) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to the ground of the apparatus body (i.e. when the operator performs an action to open the cover 53', the finger contacts the surface of the cover ("contact section") -- as shown in figure 4, the contact section/cover 53' is electrically connected to ground so as to provide for electrostatic discharge when the finger moves the cover to expose the sensor -- see col. 6/38-47),

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Setlak does not expressly disclose that the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base of the cover, and that the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof.

Setlak discloses that the cover 53' is "pivotally connected" (col. 6/43-44), however,

Setlak does not expressly disclose that the cover 53' "has one free end and another base end and
is moved ... by means of a hinge," as claimed.

Bradney discloses a fingerprint sensing apparatus (figure 4a) that utilizes a cover pivotally connected cover disposed over the sensing portions in substantially the same manner as Setlak. Bradney's figure 4a shows the cover being pivotally connected by means of a hinge so that the cover has one free end and another base end that pivots. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a hinge as taught by Bradney, since Bradney shows that utilizing a hinge is a conventional way to "pivotally connect" a fingerprint sensor cover.

In addition, figure 4a of Bradney illustrates a fingerprint sensor apparatus design where the free end of the cover is gently curved in such a manner, apparently to reciprocate the recess of the sensor. Such a design would have been obvious to those skilled in the art at least for the purpose of fitting the cover within a recessed sensor portion. Bradney shows this design of a cover for a fingerprint apparatus to be conventional and well-known.

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Regarding claim 5, Bradney discloses the contact section (i.e. cover 50) is arranged in a recess, and the recess and the contact section are also curved along with a curvature profile of the cover. Figure 4a of Bradney illustrates a fingerprint sensor apparatus design where the hinged cover 50 is arranged in a recess, and the recess (i.e. recessed sensor area) and contact section (i.e. the free end of cover 50) are also curved along with a curvature profile of the cover. As shown in figure 4a, when the cover 50 is in the closed position, a portion thereof is arranged in a recess on the apparatus body corresponding to the location of the sensor, and both the end of the cover and the recessed sensor area are curved according to the curvature profile of the cover. Such a design would have been obvious to those skilled in the art at least for the ergonomic benefits of comfortably receiving a user's finger in a recessed portion and providing a cover that completely covers the recessed sensor portion when the cover is in the closed position. Bradney shows this design of a fingerprint apparatus to be conventional and well-known.

Regarding claim 9, Setlak discloses an electrical unit including a fingerprint recognizing apparatus, said unit comprising:

a unit casing (51);

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section (i.e. placement surface 52 coupled with sensing electrode 78);
a cover (53', figure 4) movable between an open position and a closed position
for protecting the sensor section; and

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a contact section (53', figure 4) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing (i.e. when the operator performs an action to open the cover 53', the finger contacts the surface of the cover ("contact section") -- as shown in figure 4, the contact section/cover 53' is electrically connected to ground so as to provide for electrostatic discharge when the finger moves the cover to expose the sensor -- see col. 6/38-47),

Setlak does not expressly disclose that the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base of the cover, and that the contact section is arranged in a recess which is provided on the unit casing at a position near to the free end of the cover when it is in the closed position.

Setlak discloses that the cover 53' is "pivotally connected" (col. 6/43-44), however, Setlak does not expressly disclose that the cover 53' "has one free end and another base end and is moved ... by means of a hinge," as claimed.

Bradney discloses a fingerprint sensing apparatus (figure 4a) that utilizes a cover pivotally connected cover disposed over the sensing portions in substantially the same manner as Setlak. Bradney's figure 4a shows the cover being pivotally connected by means of a hinge so that the cover has one free end and another base end that pivots. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a hinge as taught by

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Bradney, since Bradney shows that utilizing a hinge is a conventional way to "pivotally connect" a fingerprint sensor cover.

In addition, figure 4a of Bradney illustrates a fingerprint sensor apparatus design where the hinged cover 50 ("contact section") is arranged in a recess, which is provided on the unit casing at a position near to the free end of the cover when the cover is in the closed position. As shown in figure 4a, when the cover 50 is in the closed position, a portion thereof is arranged in a recess on the apparatus body (i.e. it fits into a recess) corresponding to the location of the sensor. Such a design would have been obvious to those skilled in the art at least for the ergonomic benefits of comfortably receiving a user's finger in a recessed portion and providing a cover that completely covers the recessed sensor portion when the cover is in the closed position. Bradney shows this design of a fingerprint apparatus to be conventional and well-known.

Regarding claim 10, Bradney discloses the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof (see the illustration of the cover 50, figure 4a).

Regarding claim 11, Bradney discloses the recess and the contact section are also gently curved along with a curvature profile of the recess (see the illustration of the cover 50, figure 4a).

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki.

Regarding claim 14, The Examiner takes Official Notice that, at the time of the applicant's claimed invention, the usage of mounting plates to mount electronic devices to

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casings or enclosures via a screw(s) was well known. Mounting plates have the advantage that the pressure(s) of the screw(s) is distributed over the area encompassed by the plate. Among other things, this stabilizes the mounted component, allows the mounted component to be flush with the mounting surface of the casing, and provides more uniform pressure to the surface of the mounted component, thereby reducing potential damage (e.g. cracking) of the component when pressure is applied during the mounting process.

It would have been straightforward for one of ordinary skill in the art to attach the fingerprint recognition apparatus to the unit casing by using a mounting plate secured by screws. Given the ease with which this can be done and the advantage of using such plates, it would have been obvious to one of ordinary skill in the art, at the time of the applicant's claimed invention, to secure the fingerprint recognition apparatus to the unit casing using mounting plate fixed in place by means of screws. In doing so, one obtains an electrical unit, in accordance with claim 7, further comprising a mounting plate for rigidly securing the fingerprint recognizing apparatus to the unit casing by means of screws. Such an electrical unit satisfies all limitations of claim 14.

11. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of U.S. Patent 6,382,416 by Gainey.

Regarding claims 6 and 12, Suzuki does not explicitly include a locking means for locking the cover (7) in its closed position, the locking means comprising:

a. a first engaging member provided at the free end of the cover, and

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b. second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging member are mutually engaged with each other when the cover is in its closed position.

Gainey discloses fingerprint recognition apparatus (e.g. Gainey Figs. 3Cand 4A) consisting of a locking means (i.e. looped latch lock 34 and the engaging portion of cover 32 depicted in Fig.3C of Gainey – see also column 2, lines 34-38 and column 5, lines 38-55) used to lock, in a closed position, a movable hinged cover (e.g. Gainey Fig. 3C reference number 32), which protects the fingerprint recognition sensor (e.g. Gainey Fig. 4A, reference number 28). See, for example, Fig. 3C of Gainey and column 5, lines 38-55. This locking means includes of the following elements:

- a. A first engaging member provided at the free end of the cover. Observe, in Fig. 3C of Gainey, the lip at the end or cover 32 opposite to hinge 36 (i.e. the free end). This lip engages the latch lock 34 and thus, for the purposes of this discussion, constitutes a *first* engaging member.
- b. Second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging member are mutually engaged with each other when the cover is in its closed position. This is evident from the operation of the latch lock 34 illustrated in Fig. 3C of Gainey and further described in column 5, lines 38-55. This latch lock, since it mutually engages the first engaging member, constitutes a second engaging member.

It would be a simple exercise for one of ordinary skill in the art to incorporate the locking means taught by Gainey into the fingerprint recognition apparatus of Suzuki. The addition of the

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locking means secures the cover in the closed position more firmly, thereby further protecting the delicate sensor from inadvertent exposure to potentially harmful entities or forces. Given the simplicity of such a modification and motivated to provide a more robust fingerprint recognition apparatus, it would have been obvious to one of ordinary skill in the art, at the time of the applicant's claimed invention, to incorporate the locking means taught by Gainey into the fingerprint recognition apparatus of Suzuki.

Allowable Subject Matter

12. Claims 1, 2, 6-8, 12, 14, and 15 are rejected herein under either 35 U.S.C. § 102(a) or 35 U.S.C. § 103(a) by Japanese Patent 2001005951A by Suzuki et al., published 12 January 2001.

The Suzuki reference intervenes Applicant's U.S. filing date of 3/20/2001 and foreign priority date of 10/13/2000. Therefore, the rejections in view of the Suzuki reference can be overcome by providing a translation of Applicant's priority document(s) is response to this Office action. Should Applicant overcome the Suzuki reference in such a manner, claims 1, 2, 6-8, 12, 14, and 15 would be allowable since Setlak (5,940,526) and the other prior art of record fail to disclose or fairly suggest that the movable cover and the contact section (which is grounded) are "separate elements," as claimed. As shown in figure 4 of Setlak, electrostatic discharge of a user's finger is provided by grounding the pivotal cover 53'. However, there is no "separate [grounding] element" that contacts a user's finger upon opening the cover with the finger.

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Related Prior Art

13. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

U.S. Patent 6,871,242 by Ho-Lung et al.

U.S. Patent 6,950,541 by Setlak et al.

U.S. Patent 6,970,584 by O'Gorman et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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CML Group Art Unit 2624 15 May 2006

> HNGGEWU PRIMARY EXAMINER